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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,374	10/07/2003	Johan Rade	10787-032	4631
25227	7590	11/27/2006	EXAMINER	
MORRISON & FOERSTER LLP 1650 TYSONS BOULEVARD SUITE 300 MCLEAN, VA 22102			PATEL, JAYESH A	
			ART UNIT	PAPER NUMBER
			2635	

DATE MAILED: 11/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/680,374

Applicant(s)

RADE, JOHAN

Examiner

Jayesh A. Patel

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9-21 is/are rejected.
- 7) ☒ Claim(s) 5-8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) \*
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08) \*  
Paper No(s)/Mail Date 09/12/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3,9,11-14,16,20,21 are rejected under 35 U.S.C. 102(b) based upon a public use or sale of the invention of Apparatus and method for hybrid compression of raster data by Accad (US 5982937) hereafter Accad.

1. Regarding Claim 1, Accad discloses, A system for graphics compression and display, comprising: a compression component; and a decompression component; wherein said compression component comprises a simplifier module and a lossless compressor module, and wherein said decompression component comprises a decompressor module and a renderer module in Fig 3. It discloses First compressor (150), Second compressor (160), First decompressor (310), Second Decompressor (320) and a Renderer (54).

2. Regarding Claim 2, Accad discloses a system as in claim 1, wherein said simplifier module is configured to perform lossy compression in Fig 3 (160) at (Col 8, Lines 28-30).

3. Regarding Claim 3, Accad discloses, a system as in claim 1, wherein said simplifier module is operable to receive BMP files and to output compressed versions of said received BMP files as image files at (Col 5, Lines 24-29 and Lines 39-49).

4. Regarding Claim 9, Accad discloses, a system as in claim 1, wherein said lossless compressor module is operable to perform run-length encoding of color regions at (Col 8, Lines 17-20).

5. Regarding Claim 11, Accad discloses, a system as in claim 1, wherein said lossless compressor module is operable to estimate encoding parameters at (Col 4, Lines 4-12 and Col 3, Lines 10-24).

6. Regarding Claim 12, Accad discloses, a system as in claim 1, wherein said lossless compressor module comprises a predictor operable to predict upcoming color and run-length at (Col 6, Lines 33-67 and Col 7, Lines 1-47). Also at (Col 12, Lines 12-25) Accad discloses the determination of the pixels and their size.

7. Regarding Claim 13, see the explanation of claim 12.

8. Regarding Claim 14, Accad discloses, a system as in claim 1, wherein said lossless compressor module uses multi-state Huffman coding at (Col 8, Lines 39-44).

9. Regarding Claim 16, Accad discloses, a system as in claim 1, wherein said lossless compressor module uses fixed table prefix coding of run-length values in (Col 11. Lines 42-43 Figure 6).

10. Regarding Claim 20, Accad discloses, A system as in claim 1, wherein said renderer module is operable to receive a decoded device independent color table and convert said table into one or more device dependent colors at (Col 5, Lines 39-51).

Claim 21 is rejected under 35 U.S.C. 102(b) based upon a public use or sale of the invention of Image compression method to reduce Pixel and Texture memory requirements in Graphics applications by Powell, III (US 6292194) Hereafter Powell.

11. Regarding Claim 21, Powell anticipates all the limitations of Claim 1, A system for graphics compression and display, comprising: a compression component; and a decompression component; wherein said compression component comprises a simplifier module and a lossless compressor module,

and wherein said decompression component comprises a decompressor module at (Col 43, Lines 35-62), a renderer (Fig 1 and Col 2, Lines 29-37) and the Color space conversion at (Col 44, Lines 66-68 and Col 45, Lines 1-44).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Accad in further view of Yue. (US 6748116) hereafter Yue

12. Regarding Claim 4, Accad anticipates all the limitations of Claims 2 and 1. Accad also discloses quantization at (Col 8, Lines 39-44). Accad however does not disclose quantization done based on the histogram.

Yue discloses, an apparatus and method of compressing and decompressing image files wherein said lossy compression comprises histogram-based quantization at (Fig 11b, Col 13, Lines 38-45). The histogram-based quantization is local and the apparatus as used by Yue achieves a high compression ratio, conserves bandwidth, processing power and memory. Therefore it would have been obvious for one of ordinary skill in the art, at the

time the invention was made to modify the apparatus of Accad with the teachings of Yue for the above-mentioned benefits.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Accad in further view of Sakai et al (US 4853767) hereafter Sakai.

**13.** Regarding Claim 10, Accad anticipates all the limitations of Claim 1. Accad discloses a lossless compressor module creating a color table and is silent about independent color table at (Col 12, Lines 7-25).

Sakai discloses the lossless compressor creating a device independent color table and using it at (Col 4, Lines 13-29). Therefore it would have been obvious for one of ordinary skill in the art, at the time the invention was made to use the encoding system designed for correcting or compensating for the input characteristics of individual input devices, independent of the difference of the input such that the Image processing system can correctly express the color by applying a specific encoded word to the apparatus as disclosed by Accad.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Accad in further view of Kobayashi et al. (US 6611620).

14. Regarding Claim 15, Accad anticipates all the limitations of Claim 1. Accad discloses using encoding methods for compression; However Accad does not disclose specifically using the Golomb coding method for compression.

Kobayashi et al. (US 6611620) discloses the use of possible entropy encoding methods at (Col 8, Lines 45-48). The entropy coding is done to assign the shortest possible code to create coded data in compression. The use of Huffman coding and Golomb coding is also well known in the art and can be used as per the coding requirements. Therefore it would have been obvious for a person of ordinary skill in the art at the time the invention was made to have used Golomb and Huffman coding methods for the reasons stated above.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Accad in further view of Newman (US 6633668) hereafter Newman.

15. Regarding claim 17, Accad discloses, a system as in claim 1, wherein said decompressor module is operable to receive a compressed file. However Accad does not disclose outputting a corresponding file that is in a device independent intermediate format.

Newman discloses a decompressor outputting a file that is device independent intermediate format at (Col 2, Lines 19-55 and Col 4, Lines 4-54). The invention as disclosed by Newman provides a compressed color image in a standardized color space that is device and display independent, whereby the



color image data can be accessed, decompressed and then used directly in color management scheme. The invention therefore reduces the number of color space transformations, improves the processing time at decompression. The invention as disclosed by Newman also reduces the need color profile of the source device in order to support color management prior to outputting the image on the destination. Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the teachings of Newman in the apparatus of Accad for the above-mentioned reasons.

**16.** Regarding Claim 18, see the explanation of Claim 17.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Accad in further view of Yokose (US 6636642).

**17.** Regarding Claim 19, Accad discloses, a system as in claim 1. Accad however does not disclose said decompressor module comprises a predictor synchronized to a predictor in said lossless compressor module.

Yokose discloses the predictor in the compressor synchronized to a predictor in the decompressor at (Col 1, Lines 50-67 and Col 2, Lines 1-42). Yokose discloses the Run length coding applied to the predictor at (Col 3, Lines 18-20). Predicting the run lengths efficiently reduce the quantity of the code needed to represent an image. By selecting the pixel value predictor so that the

run length is longer compression ratio can be enhanced. Therefore it would have been obvious for one of ordinary skill in the art to use the teachings of Yokose to predict the run length, reduce the quantity of code and enhance the compression ratio in the apparatus for hybrid compression and decompression of raster data as taught by Accad.

### ***Allowable Subject Matter***

Claims 5-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jayesh A. Patel whose telephone number is 571-270-1227. The examiner can normally be reached on M-F 7.00am to 4.30 pm (5-4-9).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marvin M. Lateef can be reached on 571-272-5026. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2635

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JP  
11/21/2006

SP

A handwritten signature in black ink, appearing to read "Marvin Lateef", with a long horizontal flourish extending to the right.

MARVIN LATEEF  
SUPERVISORY PATENT EXAMINER